

**EIPSOCOPSIS MOULDSI SP. N. REPRESENTING A FAMILY
(PSOCOPTERA: EIPSOCIDAE) NEW TO AUSTRALIA**

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Material recently collected on Cape York Peninsula by Mr M. S. Moulds included a single female belonging to an undescribed species of Epipsocidae, a psocopteran family not previously confirmed as occurring in Australia.

Epipsocopsis mouldsi sp. n.

FEMALE

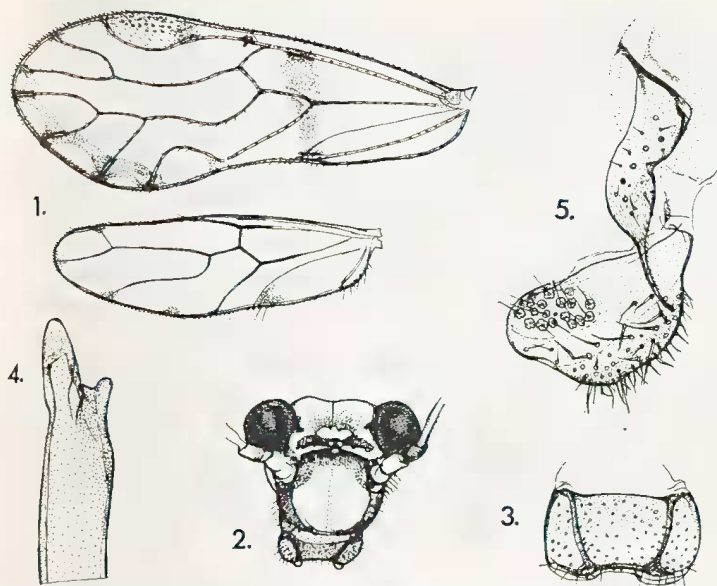
Colouration (in alcohol). Head pale testaceous with markings in various shades of brown (Fig. 2); top of head pale. Genae dark brown except for a small pale patch below eye. Scape and pedicel brown; first flagellar segment pale (antennae broken). Eyes black. Ocelli pale. Maxillary palp with second segment brown, otherwise pale. Thorax dorsally very pale brown, the anterior curved surfaces of the antedorsum and lateral lobes a little darker. Fore and hind wings hyaline, with brown markings (Fig. 1); pterostigma marked, colourless, opaque. Legs pale, a little darker at distal end of femora, tibiae with a basal and middle dark band; first tarsal segment pale with dark basal band, second segment pale brown. Abdomen pale with a few irregular brown markings dorsally near base of abdomen.

Morphology. Length of body: 2.5 mm. Median epicranial suture distinct but colourless. Vertex sparsely setose. Postclypeus fairly flat with long setae. Labrum (Fig. 3). Length of first flagellar segment: 0.45 mm. Eyes large. IO/D (Badonnel): 1.3; PO: 0.8. Ocelli small, anterior ocellus evanescent. Maxillary palps long, fourth segment very long, tapering but with rounded apex. Scape and pedicel fairly stout; first flagellar segment slightly curved in distal quarter. Lacinia (Fig. 4) with apex of characteristic form. Fore wing length: 1.1 mm; fore wing width: 1.1 mm. Fore wing broad, apex broadly rounded (Fig. 5). Sc present as a tiny vestige. Pterostigma very narrow for basal third, expanding broadly in distal parts; hind margin smoothly rounded; Rs-M crossvein distinct. Areola postica rounded. Cu₂ with a strong curve at distal end. Veins with a single row of setae; pterostigma with a few small setae. Setae on membrane between pterostigma and M₂ with blunt apices. Cu₂ without setae. Epiproct (folded in preparation of type) apparently simple, setose. Paraproct large, sclerotized, simple, with large trichobothrial field (Fig. 5). Subgenital plate simple, rounded behind, lightly sclerotized, setose. Gonapophyses (Fig. 6) reduced to external valve only.

MALE. Unknown.

MATERIAL EXAMINED

QUEENSLAND: 1♀ (holotype), Lockerbie, Cape York, 11-12.iv.1975 (Moulds). Holotype in the Australian Museum.



Figs 1-5. *Epipsocopsis mouldsi* sp. n. ♀. (1) fore and hind wings; (2) head; (3) labrum; (4) lacinia; (5) gonapophysis and paraproct.

Discussion

The genus *Epipsocopsis* Badonnel includes nine described species, eight from the African region and one from Thailand.

E. mouldsi can be distinguished from other members of the genus by its wing pattern (see Fig. 1). In *E. angolensis* (Badonnel) (Angola) there are extensive dark areas of wing membrane; *E. machadoi* Badonnel (Angola and Madagascar) has an irregular submarginal band from pterostigma to areola postica; *E. vilhenai* Badonnel (Angola) has such a band from pterostigma to wing apex only; *E. obuduensis* New (Nigeria) has little colour on the wing apart from a spot at the nodulus and one at Cu_{1b} ; *E. spatulata* Smithers (Madagascar) has a faint suggestion of a submarginal band from pterostigma to areola postica; *E. stuckenbergi* Smithers (Madagascar) has a strong, broad, marginal band from pterostigma to areola postica; *E. thailandensis* New (Thailand) has partial bands across the wing; *E. truncatulus* Badonnel (Madagascar) has a pale wing with spots at the nodulus, at the ends of the veins and above the basal section of Cu_{1a} ; *E. cincta* Badonnel (Gabon) was described from a nymph with a very distinctive V-shaped mark on the front of the head, a pattern not found in *E. mouldsi*.

Badonnel (1967) provided a key to the species then known.

It is possible that some Oriental, Indonesian and New Guinea species at present included in *Epipsocus* Hagen should be placed in *Epipsocopsis* but this genus is characterized mainly by features of the genitalia and mouthparts which have not been described in those species. In particular, *Epipsocus*

marginatus Enderlein from New Guinea has a wing pattern similar to that of some species of *Epipsocopsis*.

Although Enderlein (1903) described *Epipsocus funestus* from Queensland and *Epipsocus villosus* from New South Wales, these were transferred to *Hageniella* Enderlein (Enderlein 1919) which was synonymized with *Pseudoeccilius* Enderlein (Pseudocaeciliidae) (Roesler 1944) and *Epipsocopsis mouletii* is thus the first true epipsocid to be found in Australia.

Acknowledgements

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References

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A KEY TO SPECIES OF AUSTRALIAN OTITIDAE (DIPTERA: SCHIZOPHORA) WITH NOTES ON DISTRIBUTION

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Abstract

Four species of Otitidae, subfamily Ulidiinae, are recorded from Australia: *Pseudeuxesta prima* (Osten Sacken); *Acrosticta apicalis* (Williston); and the introduced *Physoctenidia aenea* (Fabricius) and *P. demandata* (Fabricius). A key is given to species and their distribution recorded.

Australian Otitidae can be distinguished from Tephritidae by the absence of incurved lower fronto-orbital bristles and unbroken costa, and from Platystomatidae and Pyrgotidae by the first vein being bare dorsally, or at least setulose on distal half. Material examined is housed in the Australian Museum, Sydney.

Key to species of Otitidae from Australia

1. Prescutellar bristles present; wings with an apical band; frons setose
 Prescutellar bristles absent; wings hyaline; frons bare
2. Frons smooth; entire inner surface of second antennal segment with black setae; fore coxa with distinct black bristles anteriorly; a darkened band extending from stigmal cell to fourth vein *Pseudeuxesta*
 Frons strongly wrinkled; second antennal segment setose on inner apical margin only; fore coxa bristled apically only; stigmal cell darkened and a crescent shaped spot distal to junction of second and third veins *Acrosticta*